MULTI-STAGE MOVING OBJECT SEGMENTATION

REMARKS

This responds to the Office Action mailed on July 16, 2008.

Claims 1, 16 and 27 are amended, no claims are canceled, and claims 28 - 30 are added; as a result, claims 1-30 are now pending and subject to examination in this application.

§103 Rejection of the Claims

Claims 1-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pavlidis et al.: Urban Surveillance Systems, 2001 in view of Monroe et al., US-2003/0025599 and further in view of Flickner et al., U.S.-2003/0107649A1.

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Monroe et al., US-2003/0025599 in view of Pavlidis et al.: Urban Surveillance Systems, 2001 and in further view of Flickner et al., U.S.-2003/0107649A1.

The Applicant has amended the claims, respectfully submits that the amendments overcome the rejection of the claims, and respectfully requests the withdrawal of the rejection of the claims.

Specifically, the claims have been amended to recite that for the plurality of frames comprising a selected portion of a frame with a first pixel color distribution, the first color distribution is preselected. As noted in the specification, this preselection can occur at initialization based on the knowledge of an operator. Consequently, an operator can determine beforehand that video segments relating to the sky are of no interest, and the blue color of the sky can then be treated as having no motion of interest. In contrast, the Flickner references relates to applying a temporal median filter to several seconds of video so as to distinguish moving pixels from stationary pixels. That is, the Flickner reference relates to a real time segment of video, not to a pre-selection of a first color distribution.

The claims additionally distinguish over the newly cited Flickner reference because the Flickner reference relates to a process that applies to entire video frames using a temporal filter over time to process all captured frames for motion. The process in Flickner is also applied

¹ Applicant's Specification, ¶ [0045].

² Flickner, ¶ [0025].

Page 8 Dkt: H0005041.35984

evenly throughout each frame using connected component algorithms to separate foreground from background and in grouping human figures.³

The claimed subject matter by contrast does not recite connected components or temporal median filters. Rather, the claimed subject matter relates to "high speed motion detection" to identify only a few frames ("remove frames in which a threshold amount of motion is not detected"), out of all the frames captured, where motion exists (i.e., temporal filtering). The claimed subject matter then decomposes each frame ("a first color distribution associated with a first contextual information" and "a second color distribution associated with a second contextual information") to process only areas of interest that represent contextual information of interest with a particular color distribution (i.e., spatial filtering). The claimed subject matter further applies a tailored analysis at different resolutions per region of interest within each frame based upon the contextual information and the associated color distribution.

³ *Id*.

Page 9 Dkt: H0005041.35984

e: MULTI-STAGE MOVING OBJECT SEGMENTATION

Title:

Name

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 371-2140 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

COMMECMANI TIMEDERO & MORCONER RA

Signature